Amendments to the claims:

1. (currently amended) A method of optimization of adjustable parameters of at least one machine, comprising the following steps:

providing a data processing system, wherein the data processing system is a diagnosis system;

optimizing adjustable parameters by processing of at least one process algorithm provided in the data processing system;

selecting the process algorithm to be processed from a plurality of process algorithms; and proposing or automatically selecting a process algorithm by the data processing system depending on data selected from the group consisting of machine-internal data, machine-external data, and target data, wherein an adjustable parameter to be optimized, a further parameter and an internal expert knowledge are used as the machine internal data;

processing the machine-internal data and machine-external data by the data processing system in consideration of the target data; and

generating further-processible output data.

2. (currently amended) A method as defined in claim 1; and further comprising the step of determining the optimization of the adjustable parameters by target data selected from the group consisting of editable target data[[,]] and storable target data[[,]] ~~and both~~.

3. (canceled)

4. (canceled)

5. (currently amended) A method as defined in claim 1 [[4]]; and further comprising the steps of editing and storing the machine-internal data, the machine-external data and the output data by the data processing system.

6. (previously presented) A method as defined in claim 1; and further comprising the step of operating the data processing system in a time controlled manner.

7. (canceled)

8. (currently amended) A method as defined in claim 1 ~~7~~; and further comprising the step of using a traveling speed, a rotary speed of at least one threshing drum and/or the rotary speed of a blower of at least one cleaning device as the adjustable parameters to be optimized.

9. (currently amended) A method as defined in claim 1 ~~7~~; and further comprising the step of using a crop-specific and/or machine-specific parameter as the further parameter; and performing the determination of the further parameter by sensors which are in operative communication with the machine or by inputting.

10. (previously presented) A method as defined in claim 9; and further comprising the step of using a parameter selected from the group consisting of a grain loss, a grain throughput, a crop moisture, a crop total throughput and a broken corn portion as the further parameter.

11. (currently amended) A method as defined in claim 9; and further comprising the step of using ~~as the further parameter~~ adjustment regions for parameters of working units of the machine as the further parameter.

12. (currently amended) A method as defined in claim 5; and further comprising the steps of generating the machine-external data by external systems and using ~~as the machine external data~~ plant-specific data, geographic data, weather data and/or external expert knowledge as the machine external data.

13. (previously presented) A method as defined in claim 12; and further comprising the step of using crop and/or data and experience knowledge as the external expert knowledge and as internal expert knowledge.

14. (currently amended) A method as defined in claim 1; and further comprising the step of processing ~~with the at least one process algorithm of the data processing device, of~~ a diagnosis selected from the group consisting of process

diagnosis, case diagnosis, and model-oriented diagnosis[[,]] with the at least one process algorithm of the data processing device ~~and combination thereof~~.

15. (canceled)

16. (canceled)

17. (previously presented) A method as defined in claim 1; and further comprising the step of defining situation patterns for the process algorithms by at least a part of data selected from the group consisting of machine-internal data, machine-external data, target data and combinations thereof; and selecting a situation pattern which comes close or is identical to an instantaneous situation pattern and a process algorithm linked to the situation pattern, depending on the at least one part of the machine-interior data and machine-exterior data with consideration of the target data which defines at least a part of an instantaneous situation pattern.

18. (previously presented) A method as defined in claim 1; and further comprising the step of generating changed process algorithms by the data processing system depending on machine-interior data and machine-exterior data and with consideration of changeable target data.

19. (previously presented) A method as defined in claim 1; and further comprising the step of generating changed situation patterns by the data processing

system in dependence on machine-interior data and machine-exterior data and with consideration of changeable target data.

20. (previously presented) A method as defined in claim 1; and further comprising the step of storing process algorithms, situation patterns or both in data sets, wherein the data sets include at least a part of machine-internal data, machine-external data and target data.

21. (previously presented) A method as defined in claim 1; and further comprising the step of incorporating in data processing system situation patterns and associated process algorithms and/or optimized adjustable parameters to be available for further machines.

22. (previously presented) A method as defined in claim 1, wherein the machine is an agricultural harvester; and further comprising the step of determining at least one process algorithm depending on harvesting conditions of the agricultural harvester.

23. (currently amended) A method as defined in claim 1; and further comprising the step of adapting the processing algorithm by analysis and evaluation ~~questioning~~.